



Using PDF and SAS Transport for Electronic Submissions

Greg Brolund

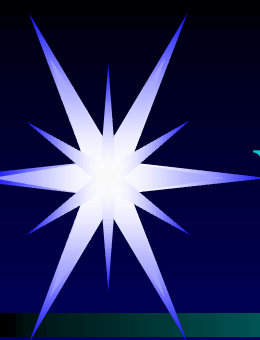
CDER / FDA

March 1, 1999



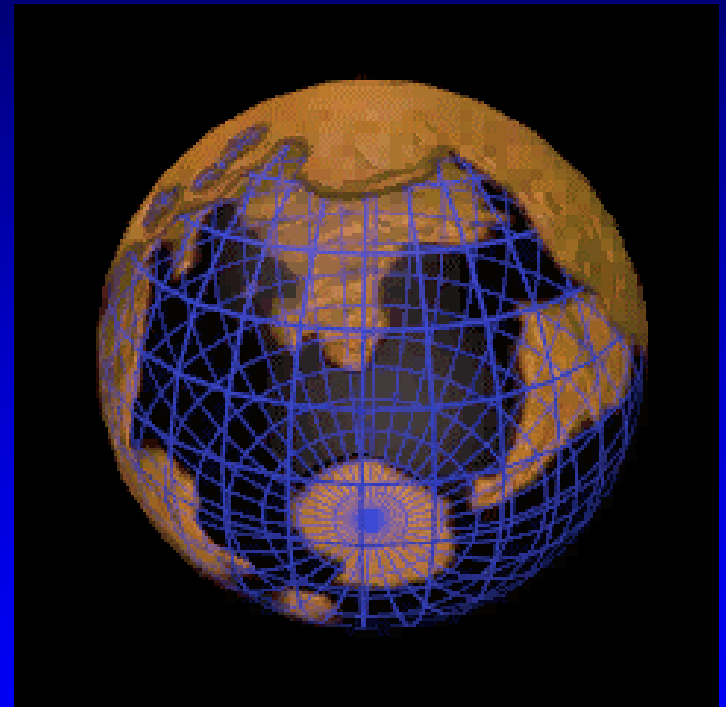
Overview

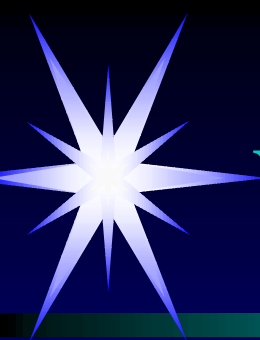
- Why PDF for text
- General PDF recommendations
- SAS Transport for datasets
- General SAS Transport recommendations



Why PDF? - General Requirements

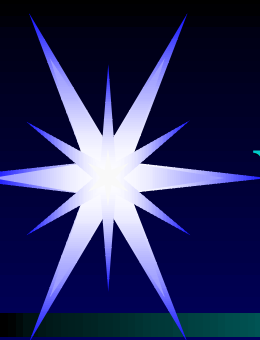
- Archivable
- De facto standard
- Recommended ICH standard for text submission
- Company commitment to product and future readability





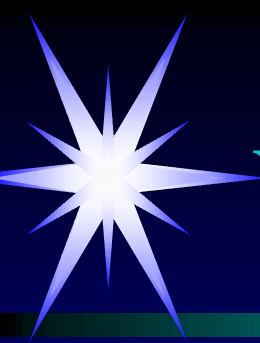
Why PDF? - FDA Requirements

- The electronic submission must maintain page fidelity
- Document sections must be able to be printed and appear as they would have on a paper submission in terms of font, page orientation, table formatting and page numbering.



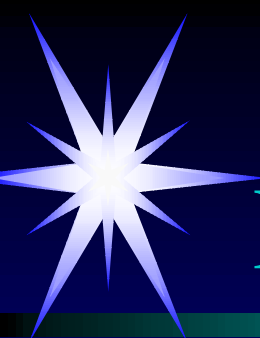
Why PDF? - FDA Requirements

- Replace paper, i.e. electronic copy must be trustworthy, complete and accurate.
- Allow efficient accessing, handling, review, and maintenance.
- Provide the ability to easily navigate through the submission.



Why PDF? - FDA Requirements

- Electronic submission must be able to be annotated and printed.
- Each submission, amendment and supplement must have a table of contents.



PDF Advantages

- Relatively low cost yet functional in terms of implementation and support.
- Free viewer
- Creation using a PDF device driver or from any Postscript file
- Detailed advance technical agreements are not necessary

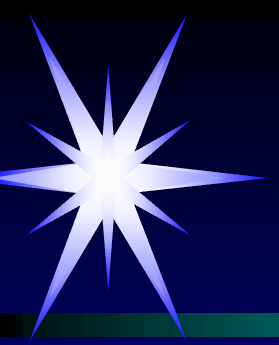
PDF Advantages

- Functional navigational aids
- International support
- Multiple source (Word processor, HTML, SGML, TIFF, others)





General PDF Recommendations



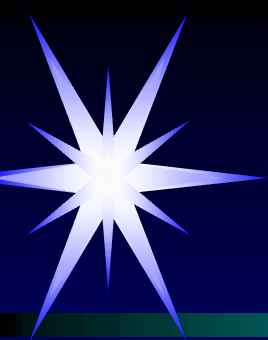
Fonts

- Limit the number of fonts used
- True Type or Adobe Type 1
- Embed all fonts
- Do not subset



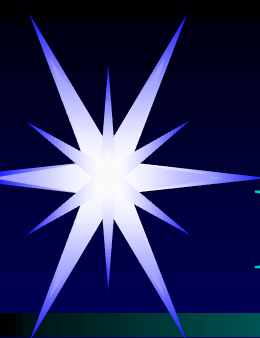
Page Setup

- Present correct orientation
- Page Size 8 1/2 by 11
- Margins to allow binding



Original Documents

- Use electronic document as the source whenever possible
- Acrobat Distiller recommended
- Legibility is the primary consideration - select appropriate scanning resolution
- Black and white, if possible, to minimize size



Hyperlinks and Bookmarks

- In general:
 - Bookmarks as a table of contents
 - Hyperlinks for off page references
- See specific subsections for recommendations
- Select “Inherit Zoom” when creating links



Document Information Fields

- Provide index to make the fields searchable
- Use title field for requested information
- See guidance for specific information for each NDA item

General Info

X

D:\ichm2\Acknowledgment message\whitep13.pdf

Title:

N123456, package insert, approved, 10jan1

Subject:

Author:

Keywords:

Creator:

PSCRIPT.DRV Version 4.0

Producer:

Acrobat Distiller 3.01 for Windows

Created:

4/17/98 8:50:11 AM

Modified:

4/17/98 8:50:11 AM

Optimized:

No

File Size (Bytes):

77175

OK

Cancel



Document Security

► Do not restrict access

Document Security

Security Method: None

Open Password: No

Security Password: No

Printing: Allowed

Changing the Document: Allowed

Selecting Text and Graphics: Allowed

Adding or Changing Notes and Form Fields: Allowed

OK



Indexing

- Acrobat Catalog
- Subdirectory for indexes
- See subsections for additional recommendations
- Link and automatically open the index



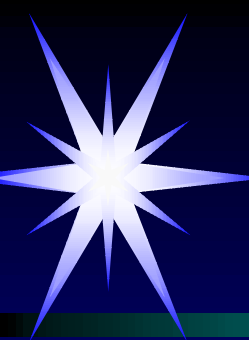
SAS Transport for Datasets

- Open specification
 - www.sas.com/techsup/download/technote/ts140.txt
- Compatible with commonly used spreadsheet and statistical software
- Can be transferred to common database systems
- Easy to use in CDER and in many companies
- Third part software to build and read SAS Transport files



SAS Transport Recommendations

- SAS Transport Version 5
- Provide data definitions as PDF documents
 - Provide descriptive information in the transport description field
- Submit example data prior to filing
- Guidance has specific recommendations for each appropriate NDA items
- 25 Mbytes / file or less



Final Guidance Jan 27, 1999!

